DOCUMENT RESUME

ED 078 841 LI 000 599

AUTHOR	Von Rodungen, Sue B., Ed.
TITLE	Library Lectures; Numbers One, Two, Three, and Four, March 1965 - May 1966.
INSTITUTION	Louisiana State Univ., Baton Rouge. Library.
PUB DATE	67
NOTE	50p.;(35 References)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Classification; *Librarians; Libraries; *Library Automation; Library Collections; Library Science; Library Technical Processes; *Professional Continuing Education
IDENTIFIERS	*Library of Congress Classification

ABSTRACT

The first lecture in this series discusses continuing education for librarians at a time (1965) when many such programs were just beginning and offers suggestions on various approaches to take. In the second lecture, "Automation--Prospects and Implications for Libraries," the purpose is to provide an overview of the field of automation in order to understand past developments and thus perceive the implications for tomorrow's librarians. The third lecturer states that "Libraries Are More Than Books" and urges that they be given greater emphasis and support as an important means of educational and intellectual stimulation for the future. In the final lecture, "The Trend to LC," the author presents thoughts on changing library classification schemes--the costs, benefits and problems involved. (Other lecture series are available as ED 050731, 050758 and LI 004409.) (Author/SJ)

FILMED FROM BEST AVAILABLE COPY

ED 078841

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

LSU Library

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

LIBRARY LECTURES

numbers one, two, three, and four

March 1965 - May 1966

Edited by Sue B. Von Bodungen

Louisiana State University Library
Baton Rouge, Louisiana
1967

LI 000 599

Copyright Louisiana State University Library, Baton Rouge 1967

Foreword

The LSU Library Lectures began on March 5, 1965 through a gift from the LSU Foundation. The lectures have been planned not only as a source of enrichment for the LSU community but as a means of drawing statewide attention to the significant role of the Library within the University. With the publication of this first series and of future ones the LSU Library will have the opportunity to make a permanent contribution to the literature of the library profession. The second series will begin in the fall of 1966.

The lectures in the first series were delivered by Dr. David Kaser, Mr. Joseph Becker, Mr. Carl H. Pforzheimer, Jr., and Dr. Edward G. Holley. Each lecture reflects in an outstanding way a topic of vital interest to librarians and educators of today.

Special thanks are extended to Mary Jane Kahao for the contribution which she made to the series as Chairman of the LSU Library Lectures Committee.

Sue B. Von Bodungen
Assistant to the Director

Contents

Number One

Continuing Education in the Library Profession 1
by David Kaser

Number Two

Automation—Prospects and Implications for Libraries 10
by Joseph Becker

Number Three

Libraries Are More Than Books 17
by Carl H. Pforzheimer, Jr.

Number Four

The Trend to LC
Thoughts on Changing Library Classification Schemes 29
by Edward G. Holley

Continuing Education In the Library Profession

BY DAVID KASER

The increasing demand for librarians in the nation's labor markets is a phenomenon which we have now been experiencing for more than a quarter century. We have learned to live with it, to expect it, to circumvent its debilitating effects in myriad ways—indeed have almost come to expect that it will be always with us. And it well may; at least there is as yet no indication of its tapering off.

We have, in our professional literature, in conferences, and in private discussion, attributed the shortage of librarians to many factors, to individual circumstances, and to concatenations of matters. We have complained that beginning salaries were too low, and they long were, but the nation's most recently published average of $5,902 is no longer really uncompetitive. We have blamed our image, but even that is now changing. Or at least I think it is changing; if the image is not changing to look more and more like me, then I am coming to look more and more like the image. A less welcome mutation I find difficult to conceive. We have attributed the shortage of trained personnel—at least in academic libraries—to poor and unclear status, yet on increasing numbers of campuses librarians are coming to be recognized and treated as high-order academic officials. Despite the improvements that the past decade had seen in these matters, however, the shortage of librarians persists.

The LSU Library Lectures were inauguarated on March 5, 1965, by David Kaser of Nashville, Tenn. In addition to his duties as the director of the Joint University Libraries in Nashville, Dr. Kaser is the current editor of College and Research Libraries *and a professor of library science at Vanderbilt University, George Peabody College, and Scarritt College. He received the A.B. degree at Houghton College in New York, the M.A. from the University of Notre Dame, and the A.M.L.S. and Ph.D. from the University of Michigan. Dr. Kaser's books include* Messrs. Carey & Lea of Philadelphia, Joseph Charless, Printer in the Western Country, *and* The Cost Book of Carey & Lea.

No doubt, many of the improvements which we have recently experienced in the emoluments and perquisites of our profession are due to an increasing awareness on the part of society that effective and efficient information transfer on all levels—which is, after all, our primary mission—is absolutely essential to its survival. It is coming to realize that unless librarians—or documentalists, or information scientists, or whatever other highfalutin epithet or appellation society wishes to apply to us—unless we acquire, control, and facilitate the necessary transmission of the incredible masses of new data being manufactured by our society, then that society is building little more than a huge technological Tower of Babel, whereon the participants will one day find themselves no longer able to communicate one with another; when communication ceases, progress will cease, and where there is no progress there is only regress. Viewed in this way, I believe that our responsibility as the proper stewards of society's information is a staggering responsibility, and I am persuaded that this view is an inexorable view—one which neither we nor a right-thinking society can deny or take lightly.

As society has come recently to recognize our importance to the national interest, public financial support—in unprecedented amounts—has begun to become available. First the Library Services Act came to the aid of our public library efforts, and PL-480 and other legislation began to assist our research libraries. The Higher Education Facilities Act of 1963 is now granting construction money to college and university libraries, and book fund and other library assistance grants will be made available in a multiplicity of ways on diverse fronts, if some of the 1965 education legislation is enacted.

Not all of our new financial assistance, however, is coming from the federal government. Most of our locally-derived budgets are also increasing in advance of the cost-of-living, or the population growth, or the Gross National Product, or whatever other appropriate yardstick one would wish to measure it against. Private benefactions to libraries are also higher than they have ever been before, as are corporate and foundation grants. All of this increased financial assistance results from a developing judgment within society that we are important to it and that our needs warrant a fairly high priority in its long list of deserving activities.

Concurrent, however, with increased funding, we are also experiencing increased scrutiny from society; society, after all, is justi-

fiably interested in assurance that the money which is being invested in us is being soundly managed and is deriving an adequate *quid pro quo*. As long as we were not costing much money nor particularly important to any essential activity, we were pretty much allowed to go our own way; we were harmless drudges who needed more to be looked after than to be looked at. But that is now changing, and not everyone who comes to look at us is as convinced that we are doing everything as well as we think we are doing it.

Society sees many of us looking backward to a bibliothecal Golden Age when benign men and women peopled our staffs, affable people who leisurely went about the pleasant business of acquiring and cataloging a collection of good books for some indefinite and indefinable posterity. Many of our scrutinizers, however, would prefer us to look forward to a new age when librarians comprise a giant switching system in the information flow of society—an antiseptic, glass and aluminum, untouched-by-hand, brisk, vigorous, efficient, computer-driven system which is very different from what we are now. We feel, and I believe rightly, that their enthusiasm leads them too far in their aspirations; that their blithe expansiveness is born of tragic unknowledge. Yet I also firmly believe that as a profession we are too conservative, that we are too impressed by what we think of as the historical sufficiency of the status quo, when really it was insufficient in its own time and is even less adequate today. No doubt our proper course must be plotted somewhere between these two equally threatening shoals.

Change is occuring at unprecedented rates in every area of human endeavor. If we are to fulfill any measure of our responsibility to our chosen task, we too must change commensurate with our parent society or abdicate it to a new breed of information handlers who will be better attuned to newly-evolving social need. As I am sure you do, I find this latter eventuality distasteful to contemplate. Yet the days are gone forever in all disciplines when a man finished his university training and was thereby prepared to perform for two-score years thereafter a satisfactory professional service. Everyone today including librarians must continue learning until the day he dies.

Probably the professional group that came to recognize the need for continuing education comprised public school teachers. In my own generation's youth most teachers began work after only a few months of normal school training; but thereafter for years they took

extension courses, night courses, summer school courses, and correspondence courses during their teaching careers, seeking assiduously and endlessly degrees, certification renewal, and up-to-date information on methodology and theory.

Other industries followed later in the teaching profession's footsteps, but they probably improved upon the situation in education. Instead of relying upon state certification requirements to furnish the necessary stimulus to further training, entire industries in the profit-making arena found themselves—rather than individuals—being stimulated. Slowly this view of continuing education came to prevail, and its value was seen to reside not just in the individual who received it, but jointly in him and in the company he represented. Thus it behooved companies if they wished to compete to make it possible for their employees to continue learning—and not only to make it possible, but to make it easy and exciting as well.

In-service training programs were established, plant schools were developed, arrangements were made with local universities and technical schools to furnish instruction to a company's personnel. Many urban universities began duplicating their entire curricular offerings on evenings and weekends so that they could be available to adults in local companies—often on release time and at company expense. It furthermore gave universities opportunity to double the utilization of their plant facilities thereby making many members of their governing lay boards happier than they had been since learning the same lesson in their own plants decades earlier.

Library schools themselves felt obliged some years ago to accommodate this need for continuing education in the library profession, and workshops, institutes, seminars, and other short courses have long been available. Federal legislation now promises to make these both more numerous and more readily accessible in the near future than they have been in the past. Doctoral programs in library science have also been available for many years, and of course librarians are not infrequently takers of advanced degrees in other related disciplines as well.

As the library profession faces the task of continuing its education beyond the basic academic degree, it finds also that it may call upon a fair range of literature to aid it. Again there are innumerable useful books in related disciplines and some excellent books in library science proper, although I am always a bit surprised that there are not more. There are also professional journals to aid the self-educating

librarian, although again there could be more—as editor of one of them I can vouch that there are good articles which never see publication because of lack of space in existing journals, despite the fact that a new library journal springs into being every five years or so.

Opportunities for librarians to continue their formal education, and the literature which facilitates self-education have both been very useful in recent years in combatting in the library profession the tendencies to provincialism, conservatism, insularism, and resistance to change. Yet there are still, and always will be, some of these factors operative within our field. Regrettably, I must admit that in my opinion, it is library management that is at the present time doing least to eliminate them. Yet it would seem that in the library industry as in other industries it would be management that would benefit most from the effort it could invest.

Very few libraries maintain conscious and conscientious, diligent internal programs of staff development. Many things can be done within a library staff—all small, but none insignificant—to counter-effect professional dry-rot. They are not difficult things to do, nor are they inordinately expensive things to do, yet they do not do themselves, nor are they accomplished without the constant awareness and concern of the library's top management.

From the time a new young librarian is appointed to his first post it should be his supervisor's continuing responsibility that his education develop day-by-day and that his universe does not, as too often happens, shrink slowly to the dimensions of the desk before him. Youngsters come out of library schools stimulated, curious, eager to learn, and with the rudimentary skills and training necessary for continuing professional development. Too often, however, after a brief period of orientation and revision on their first jobs, they are relegated to a sink-or-swim status for which they are not prepared. It is usually only the more aggresive—and it is not always the best—who overcome the handicap and emerge as leaders. Too often their emergence occurs despite us practitioners rather than because we have done much to precipitate it.

Young library school graduates are frequently criticized for seeking administrative positions before they have had adequate "firing-line" library experience, and this is no doubt a legitimate criticism. Yet I feel that one reason youngsters do this is because they sense that their opportunities for professional growth will be better in such a

position—despite the great barriers that they must there overcome and the major errors that they will there no doubt make—than they will find in the professional isolation of a poorly-managed Siberian catalog department where they are allowed to languish. Even worse, we can all enumerate departments where tendencies on the part of young librarians to inquire, to conceive, to think in new ways about old problems as well as new, are brainwashed right out of existence by old guard conservatism within six months of the new librarian's first appointment. Where this happens to a person it is tragic, because his professional curiosity is thereby pretty effectively stifled forever—he seldom recovers—and we have made for ourselves through the experience a high-priced clerk who will be with us for four decades thereafter and will never make the substantive professional contribution that might under more desirable circumstances have been elicited.

Any organization needs the very best thinking of all of its people, and a well-managed one will encourage it on all levels. Good internal communications are essential to a satisfactory on-the-job learning situation. Staff meetings, although difficult to call in large organizations, are extremely useful in giving staff members a "sense of the whole" rather than a department-wide view. Smaller, departmental meetings also counter tendencies to settle for a job-wide view. Management-sponsored seminars and examinations of subjects of current importance are also useful in communicating a sense of system or profession wide responsibility. Library literature itself can be routed to librarians' desks—not just to department heads—to facilitate their reading of it. If management does this, librarians will soon get the point that reading it is part of their job description. Also, worth their weight in gold in a progressive library organization are department heads and supervisors who are ever conscious of this need to nurture the professional growth of their staff members.

A recent issue of the *Southeastern Librarian* has reported upon travel budgets in the research libraries of the region. They are, it seems to me, very much too low. In fact, most of them are based upon the wrong premise entirely. Most of them have been unfortunately tied to their institutions' budgets for academic travel and are restricted in use to such situations as reading papers before learned gatherings or official delegate representation at society meetings. I would urge, however, that travel budgets of libraries be thought of as serving a much different purpose—that they be considered part of the

continuing in-service training cost of operating a library. This would include—in addition to the above—their use for: wide attendance of librarians at conferences on local, state, regional, and national levels; travel, living, and tuition costs of librarians to obtain new skills or advanced competences needed by the library; sending librarians to observe processes in other similar libraries; delegating librarians to participate in a broad range of workshops, seminars, institutes, and other group training programs. Most travel budgets in southeastern research libraries—and no doubt elsewhere as well—could be effectively tripled without risking the waste of a cent.

Much mitigation of provincialism can also be accomplished by management without expending the travel budget. There are occasional all-expense workshops sponsored by foundations and government agencies, and librarians are also on occasion called upon to consult in areas of their specialization. Such consultation is not only valuable to the customer institution, but the experience is useful to the consultant and to his home institution as well, because it gives him opportunity to study a problem similar to his continuing one but in a different setting. Such an experience is broadening, and management should encourage its staff to consult whenever it has special expertise to purvey and a customer willing to purchase it. Policies should permit staff members to consult without—as is occasionally required—"making up the time," whatever that means.

Perhaps university libraries could pattern their policies concerning consultation upon those for professors in their parent institutions which normally allow one day's outside consulting per week, or some similar arrangement. Furthermore, staff members should be encouraged not to depreciate themselves and their skills by charging too small a fee. Some academic engineers groups, for example, recommend as a rule of thumb for consultant's fees, one one-thousandth of a man's annual salary per hour; perhaps this is a reasonable pattern for librarians.

A small thing, although also useful in the continuing education of a professional staff, is a policy which permits librarians to count as working time any days they spend visiting similar libraries elsewhere while they are on what is otherwise a vacation—in other words, to extend one's vacation by the number of days he spends visiting other libraries. It is probably well, of course, to require that plans be made beforehand and that management write ahead so as not to work undue hardship on the host library. Most well run libraries appreciate

opportunities to entertain visitors because this experience is useful to the host as well as to the guest; guests frequently ask questions out of innocence or naivete that, out of conservatism or unwillingness to change, we are reluctant to ask ourselves.

Liberal policies permitting long-term leave without pay can, under certain circumstances, be helpful in countereffecting insularism and encouraging expansive vision in a library staff. There is ever-growing opportunity for librarians to serve as instructors, consultants, or librarians for varying terms overseas, and sound management, it seems to me, will recognize such assignments as returning benefit not only to the recipient institution, but to the individual and to the sending institution as well. Whenever possible, a library administration should do what it can to enable its people both to receive and to accept such invitations.

Another broadening experience for librarians is the conducting of research in the areas of their specialization. Already there is some money available from foundations, government agencies, and elsewhere to sponsor such research, and there is no doubt going to be much more in the near future. Again an aggressive, progressive library management will do what it can to encourage its people to interest themselves in research, to help them get grants, and to make it possible for them to carry out and publish the results of useful projects.

Now all of these activities take time—much time—from library staffs which are already harried, harassed, and overworked, and the unpersuaded among us can be counted upon to cry "Lo here, and lo there" bewailing this great loss from the library's already limited number of productive man-hours. I firmly believe, however, that such activities as are here described return the time invested many times over in benefits to the individuals involved, to the libraries with which they are associated, and certainly to the profession at large. Furthermore, it costs management only inconvenience to have a staff member on leave without pay, and I would like to see a library frankly carry on its staff 10 or 15 percent more librarians than it can afford to pay at any given time, on the assumption that at least that many people would always be on foreign assignment, on sabbatical leave, working on sponsored research or on a grant, or in some other way on leave without pay. It seems to me that it would be one of those rare congeries of circumstances wherein everyone would bene-

fit. This is something which, after all, most of our universities have been doing for a long time.

Such activities then on the part of library management would, it seems to me, be highly conducive to solving the problem of needed change in our profession. The need for rapid change is apparent; the expertise exists; the facilities through which it can be accomplished are rapidly becoming available. The big stimulus, I feel, must now come from library management. When youngsters become convinced that librarianship is a forward-looking, progressive, and dynamic profession, in constant awareness of the kaleidoscopic needs of the society it serves, and eager to adjust its practices daily if necessary to render an essential social service, we will then have no manpower shortage. Library management must now, I believe, assume its proper leadership role in making librarianship that kind of profession by concerning itself with the constant and continuing education of our best people. By helping them fulfill themselves individually, we help the profession fulfill itself collectively, and society cannot afford to support us unless we return a full measure for its investment in us.

Automation--Prospects and Implications for Libraries

BY JOSEPH BECKER

Within the past week, I completed a literature survey covering the subject of libraries and automation. It ran the gamut from a lonely remark attributed to Melvil Dewey about the typewriter's potential use in libraries to a recent statement by David Sarnoff (Chairman of the Board, Radio Corporation of America), in which he said that intercontinental library-to-library communication by synchronous satellite was within our grasp.

If the rate of publication serves as any reliable measure of the library profession's interest in machines, then I can also report that the past decade has certainly been more active than any other. Although a core of professionals known as *documentalists* emerged after the Second World War to stimulate work in this field, their presence has not prevented the automation concept from rapidly gaining ground within traditional library circles. I found many clear signs in the literature to indicate that librarians are prepared to give automation the vigorous leadership it deserves.

As a profession, librarians possess more experience and knowledge about the field of information handling than any other. We transmit this valuable legacy to new generations of librarians on a semester-to-semester basis in library schools like the one here at LSU. However, there exists a critical need to supplement this education by training

---

The second lecture was delivered on October 1, 1965 by Joseph Becker of Bethesda, Md., director of library research for EDUCOM (Interuniversity Communication Council) and an independent consultant in library automation. Mr. Becker received his B.Ae.E in Aeronautical Engineering from Polytechnic Institute of Brooklyn and his M.S.L.S. in Library Science from Catholic University. He is co-author of a basic text, Information Storage and Retrieval, *and was editor of "Data Processing Equipment in Libraries," a series which appeared in the* ALA Bulletin. *Mr. Becker was the technical consultant for Library/USA at the New York World's Fair, 1963-65, and the director for the ALA's Library-21 at the Seattle World's Fair, 1960-62.*

students in the new technologies associated with library automation. It is our obligation to see to it that they are properly equipped to participate actively, constructively, and comfortably in the process of introducing automation to libraries.

The purpose of today's lecture is to provide an overview of the field, within which we can understand past developments and thus perceive the implications for tomorrow's librarians.

Introduction

Responsibility for storage and retrieval of printed information has traditionally rested with the librarian. Early libraries concentrated on arranging books in some prescribed order on shelves. As the number of books increased, more complex organization became necessary to make the contents of a library collection more readily accessible. To provide such organization, librarians developed subject classification schemes, the card catalog, and other tools. These bibliographic devices now comprise the basic structure for organization of library collections and constitute the fundamental locating aids that researchers employ.

Although conventional library tools today make location of a particular title among miles and miles of shelving a routine and simple task, they are not designed to provide more than a rough-cut approach to the subjects covered in the printed material in their vast collections. For the clientele served by general libraries this may be all that is needed, but when the same subject classification techniques are applied to highly specialized collections of nonbook, technically detailed data, the imprecision of such methods of content retrieval becomes apparent. Because all knowledge and language are dynamic, constantly changing processes, any subject classification becomes obsolete almost from the moment of its creation. Furthermore, as one moves into increasingly specialized areas of knowledge, research becomes more complex. As new ideas generate new facts and new terminology, the task of organizing them and establishing their proper relationship to one another becomes ever more difficult.

Emphasis has thus been placed on finding new ways and means of codifying or indexing data so that they will lend themselves to correlation rather than to group selection. The trend has been one of achieving greater depth of content analysis. Not only have new analytical methods been devised, but investigations have been made of the great mass of data involved, new storage and handling techniques may have to be invented, of a more advanced character than

those customarily used for manually shelving books and filing documents. The emergence of information storage and retrieval as a new field reflects an awareness among librarians and others that the selection and manipulation of fragments of information, rather than of entire documents, will require unconventional tools.

Because of the steady growth of publishing, and the complex ways in which information has come in recent years to pervade decision-making processes in business, science, and government, a critical need for more advanced information systems has evolved. References to the effects of expanded publishing were made by Fremont Rider in 1944 and by Vannevar Bush in 1945. Shortly thereafter, the implications of the "information explosion" in science and technology were aired and discussed at the first international conference on the subject, held in London in 1948 by the Royal Society. At that time, it was already clear that the publishing rate in science and technology was increasing exponentially, and that specialization in individual sciences and the development of interdisciplinary research were generating multiple uses for the same information. Although interest in information storage and retrieval thus received its start in the world of science, it soon spread to other areas, particularly business, industry, and government.

Another factor responsible for the independent development of the field of information storage and retrieval has been the impact of technology. The fruits of research and development in the computer sciences, the photographic industry, and signal communication promise to provide powerful new methods and techniques for information storage and retrieval. Modern data-processing equipment has already been successfully applied to the numerical areas of scientific computation and business operations. The prospect of being able to use computers to solve non-numerical problems that involve natural language has been a major impetus encouraging the evolution of advanced information storage and retrieval techniques. The appearance in 1938 of Shannon's theoretical foundation for a general theory of information stimulated researchers to investigate the possibility of applying the principles of mathematics to the problems of information communication by means of computers.

The field of information storage and retrieval includes librarians, documentalists, mathematicians, system designers, linguists, equipment manufacturers, operations researchers, and computer programmers, among others. All are concerned with methods of expediting

the prompt retrieval of information in such diverse areas as libraries, business and industry, military command and control, and scientific research. Because the field is interdisciplinary, considerable confusion regarding the boundaries of the effort has existed.

Classification of Subjects in Documents

Several specialists have devoted themselves to research into the problems of information organization. Among them is the late Mortimer Taube, who is identified with the concept of *coordinate indexing*, which provides a method of coordinating index terms as combinations rather than permutations. Taube called his index terms *Uniterms* and a coordinate index consists of a set of uniterm cards on which appear the identification numbers of the documents relevant to each uniterm. Searching is accomplished by selecting those uniterm cards pertinent to a request and correlating their document numbers. Matching numbers presumably represent those documents for which the uniterms are simultaneously relevant. Calvin Mooers proposed a concept of storing in one fixed place the codes for the subjects in a document, one code being *superimposed* on another. This technique is particularly applicable in situations where coding space is at a premium such as edge-notched cards. Mooers also conducted extensive research into the mathematical structure of coding. James W. Perry and Allen Kent have advanced the idea of the so-called *telegraphic abstract*, in which a phrase represents the logical unit of thought in a document, *sub-phrases* represent the individual words and concepts, and *role-indicators* describe the role that a particular word plays in the *phrase*. By using their method, it is possible to describe a document in an artificial language or system that carries with it more meaning than the sum of separately assigned subjects. *Faceted classification*, still another technique for organizing concepts expressed in documents, has been examined by S. R. Ranganathan and Brian C. Vickery.

Computer Analysis of Natural Language

A number of experiments have been conducted, and corresponding computer programs have been written, on the possibility of using computers to perform quasi-intellectual functions. Within the past few years, increasing emphasis has been placed on machine analysis of the syntax and semantics of natural language. This has led to the development of computer programs for such functions as language data processing, machine translation, automatic indexing, automatic abstracting, concordance building, and text condensation. Still other computer programs have been written for the preparation of per-

muted title indexes as well as conventional printed indexes. Several researchers have produced computer programs that embody sophisticated mathematical principles for searching natural language. Ways of extracting meaning from text by means of word association, syntactical analysis, and even contextual analysis have been explored. M. E. Maron has applied the calculus of probability to automatic indexing in an attempt to establish a theory of relevance.

Converting Printed Text to Machine Readable Form

The ability to convert original data automatically from the printed page to an input form usable by machines is fundamental if electronic computers are to be employed in work involving information. Until this becomes possible, the use of computers cannot be considered economical. In the absence of automatic conversion equipment, it is necessary either to type or keypunch the data over again These processes are expensive, slow, and unreliable. For these reasons, efforts are continuing to produce *character-recognition* machines. These are devices engineered to scan automatically the letters, words, and sentences of a text, converting them directly into discrete digital representation.

The goal is to "read" rapidly large quantites of printed information, so that further processing of the data can be performed by a computer. Optical scanning and magnetic ink reading are the two most common character recognition techniques in use. Thus far, only alphanumeric data in a prescribed type font are readable by machine. Research in *auditory recognition* is also underway to determine whether a machine can automatically discriminate phonetic sounds and, in so doing, produce a satisfactory digital code for input to a computer.

Compact Storage of Source Material

Microfilm is, at present, the most effective means of storing original documents and of thereby controlling their growth. An impressive array of different cameras and a multiplicity of microfilm media are available commercially. Roll film, aperture cards, film in cartridges, microfiche, sheet film, and microcards are but a few of the examples of common microforms at present in use in information installations.

Printed material that is compressed into a microform calls for auxiliary equipment — inspection viewers, service viewers, and printing equipment for individual page copying. Equipment available on the market makes it possible to view any microform and to obtain, if necessary, a copy of an entire page or part of a page in a matter of seconds. Devices that fall into this category provide push-button

copying, frame by frame, using manual, semi-automatic, or fully automatic auxiliary means.

None of the newer techniques, however, were designed for book storage; in adapting them for this purpose, greatest attention has been focussed on recording articles in technical journals or in special multi-page reports. Since all these techniques are basically photographic, storage is not limited to the printed text alone, for all forms of graphic material can be stored by use of the same treatment.

Communication and Display of Information

No discussion of the technologies pertinent to the field of information storage and retrieval would be complete without consideration of the role of communications.

In the early 1950's, RCA conducted a demonstration of *Ultrafax* at the Library of Congress. A film copy of *Gone With the Wind* was sent over communication lines to a receiving point in a distant city. This facsimile transmission heralded the use of communication facilities for the tranfer of visual data from one point to another. *Video recording and transmission* provide still another medium for sending graphic information over great distances.

Retrieval at a distance of digital and graphic information presupposes the availability of an interconnected communications network. On this assumption, research has been conducted to explore the relationship between man and machine in order to define more clearly the division of tasks between them. This in turn has led to further research in the area of *on-line* systems, which establishes direct communication between the man at an input-output console and the computer. The Massachusetts Institute of Technology has led the research effort to place at a user's fingertips the communications equipment needed to interrogate a large store of information under the control of a computer while numerous other users are simultaneously using it.

Demonstrations of remote retrieval by computer were featured at the Library/USA exhibit produced by the American Library Association (ALA) for the U.S. Pavilion at the New York World's Fair, 1964-65. Thus, requesters at computers in St. Louis, New Orleans, and Washington, D.C., were able to interrogate ALA's electronic computer at the New York World's Fair for library information. In recent months this service was expanded so that anyone with a

standard teletype machine could dial the computer directly and receive a list of the most recent periodical references to articles indexed by the H. W. Wilson Co. on 75 different subjects.

The Computer in the Library

During the past several years, some libraries have had access to a computer for the first time. This contact has been more prevalent among university and special libraries. While computer applications for purposes of information retrieval have been rare and experimental, numerous libraries have developed operating computer systems for conventional library clerical functions. Computers today are actively producing book catalogs, maintaining serial records, accelerating the acquisitions process, improving circulation control, and providing library administrators with management data heretofore inaccessible. The new library at Florida Atlantic University, for example, was the first in the country to introduce the computer as an integral part of its operations from the day of its establishment. At the national level, a survey was conducted at the Library of Congress two years ago — the results of which are apt to make a considerable impact on the American library scene. Portions of recent federal legislation on higher education include provisions for educating students in library automation and encouraging research programs in the field.

Automation is destined to bring many changes to the structure and functions of libraries. The tempo of change is already apparent. Though the thought of transition may be disturbing to some, I tend to view it as an exciting challenge and a tremendous opportunity.

Libraries Are More Than Books

BY CARL H. PFORZHEIMER, JR.

First let me thank you all for the honor and privilege of being with you this afternoon; and for so graciously including Mrs. Pforzheimer. It is a pleasant and thrilling experience for someone who loves books and libraries and so greatly respects the dedicated people who staff them, support them, and love them too.

It *is* a bit terrifying and confusing for a layman to be called upon to address this distinguished group — including so many professionals —especially if you will keep in mind that when officially dealing with librarians, I've always been faced with the stern motto of your trade, set up in huge letters wherever you are at work, *SILENCE.*

Right after accepting Mrs. Kahao's gracious invitation, I began to wonder what to talk about, and be well enough prepared to stay one jump ahead of this erudite gathering. Mrs. Kahao agreed I could talk about books and libraries and requested a short title for the announcements. She approved my selection of "Libraries Are More Than Books."

But this was really not my first choice. I knew I would have to do a lot of homework, but I looked forward to experiencing many unanticipated interesting moments while finding and reading old and new background material for this paper.

Where else but in a library, or in your own home—if it's like ours where, despite my wife's gentle protestations, we seem to follow the

The third lecture was delivered on March 4, 1966 by Carl H. Pforzheimer, Jr. of Purchase, N.Y. Mr. Pforzheimer, a bibliophile as well as an investment banker, is a member of the board of regents of the State University of New York and a member of the citizens advisory committee of the New York Public Library. The Pforzheimer collection, which his father began and which he continues to build, is rich in European literature of the 16th Century and in English books and manuscripts of the 18th, 19th, and 20th Centuries. Mr. Pforzheimer is a graduate of Harvard College and received a M.B.A. from the Harvard Graduate School of Business Administration and a Doctor of Commercial Science Degree from Pace College.

Saturday Evening Post theory that nobody who can read is ever successful at cleaning out the attic—could you find a *Scientific American* of 1899 with the statement:

> The improvement in city conditions by the general adoption of the motorcar can hardly be overestimated. Streets — clean, dustless and odorless — with light, rubber-tired vehicles moving swiftly and noiselessly over their smooth expanse would eliminate a greater part of the nervousness, distraction and strain of modern metropolitan life.

Anyone who likes to use libraries of any size is sure to make an interesting discovery of one thing while searching for another. Since this is such a pervasive and happy characteristic of books and libraries, my first choice of a title was "Adventure in Serendipity."

Yet it was strategic to discard this title, ostensibly in the interest of a laconic college notice, because announcing it so early would only have afforded all of you the prior opportunity of using that aging cliche: "You can always tell a Harvard man — but you can't tell him much!"

Let us give thanks to Sir Horace Walpole, now heavily collected at Yale, for having invented "serendipity," a word he coined in his fairy tale entitled "The Three Princes of Serendip" (the old name for the island kingdom of Ceylon) in which his three heroes had the faculty for, and usual experience of, "making happy or interesting discoveries unexpectedly or by accident."

You may now wonder why I am about to quote from *two* dictionaries. Wouldn't one be enough? You have to watch them, especially the dates of editing and publication; dictionaries can be tricky. I saw in one published in 1901 the following definition for uranium: "A worthless white metal, not found in the United States."

The *New* (sic) *Century Dictionary* (issued in 1927) describes library in the first of several definitions as:

> A place set apart to contain books and other literary material for reading, study, or reference, as a room in a private house, or as a room, set of rooms, or building for the use of the members of a society or the like, or the general public or a part of it (in which case books are often lent to the users, to be taken out); . . .

and also:

. . . a collection of books, etc. as for reading, study or reference; . . .

Twenty-six years later, in 1953, *Webster's New World Dictionary of the American Language* follows about the same sequence of definitions in terser phrases but has an additional description stating:

3. a collection of books, especially a large, systematically arranged collection for reading or reference.

The definitions are getting better, but note that neither here quoted uses the word "research," an omission, of which more later.

Turning to the *Encyclopaedia Britannica* for a quick refresher in various library and school histories was another serendipity. Did you know that the alphabetical divider on the title page of Volume 20 is "Sarsaparilla to Sorcery"?—small wonder no one drinks it any more. Or better yet, the divider on the title page of Volume 14 is "Libido to Mary Queen of Scots."

In brief review, we know that the earliest libraries (as buildings) were probably temples; and the earliest libraries (as collections) were archives.

Yet in the broadest sense, libraries are real trusts, both physically and morally, of mankind's cultural development and achievements. This statement is proven historically: from the earliest libraries, which as buildings were temples and as collections were archives, to the present day simple and complex libraries, which reflect our progress in groupings by every level of education and by every form of endeavor, through which we seek to enhance our social, political, and economic lives.

Through the centuries where there were cultures, there were books and libraries. Over the door of a library in ancient Thebes there was inscribed: "Medicine for the Soul." In Rome, Pliny-the-younger (the youngsters are always ahead of their elders) said: "There is no book so bad but something valuable may be derived from it."

But, I'm getting ahead of myself.

Where there were cultures, there were books and libraries and vice versa.

Ninevah had a library estimated at about 10,000 documents, all seemingly cataloged and methodically arranged and open to the public. There were libraries in ancient Greece and many well known

Greeks, such as Euclid, Euripides, and Aristotle, had private collections which they gathered and passed on to disciples. It was chiefly the Greeks who brought the two famous libraries at Alexandria up to 700,000 items at their peak, used cataloging, and evolved a form of bibliography. By the fourth century A.D., Rome supposedly had 28 public libraries and there were many Roman provincial libraries in parts of the Empire.

We all know that in ancient and medieval times libraries were alternatively destroyed in war or regarded as spoils of war, depending upon the ideological proximity of the antagonists or the intellectual cupidity of the conquerors. Mostly, the ancient public and private libraries disappeared.

How far has civilization really progressed? Isn't the same thing happening today wherever freedom and personal liberty are denied? Fear of the written word, or appreciation of its power, has dominated all recorded history. It was the great French liberal, Emile Zola, who said less than 100 years ago:

> If you shut up truth and bury it underground, it will but grow, and gather to itself such explosive power that the day it bursts through, it will blow up everything in its way.

Small wonder then, that during the late medieval and early renaissance periods, libraries were concentrated largely in ecclesiastical or academic enclaves, which, while scarcely free from the ebb and flow of major political and religious issues, enjoyed substantial immunity from all but the abnormal ravages of war. The monastery founded in 529 A.D. at Monte Cassino — famous in peace and sadly, too, in many wars — was the first to foster a great library, using as guidance rules earlier laid down by St. Benedict. But, though they inspired what we so admire today as gorgeous illuminated manuscripts, this happy collaboration of library and artistic abilities and early amassing of manuscript collections only contemplated the services of religious writers.

The gradual removal of many great monastic collections from habitually remote locations to the more populated centers, often to great churches, may be said to be the start of what we would today call a "public" library. Standard examples are the Abrosiana in Milan (probably still the most magnificient collection of illuminated manuscripts and incunabula outside government control), the Vatican Library, and the Bibliotheque Nationale, which even the British admit is the greatest library in the world.

Even though famous old-world universities early realized that good libraries attracted a fine faculty and student body, book production was laborious and range of subjects very narrow. The same was true of earliest European private collections, formed only by the head of a royal or high noble household.

But it was two 15th century occurrences that launched the modern libraries as we generally know them now. One was the steady growth of interest in secular rather than clerical literature. The other was the invention of printing from movable type that occurred about 1450.

Inevitable as was this invention (for which to date, the Russians have not claimed credit) to satisfy the increasing demand from clerics, scholars, and every-day folks who knew how to read and wanted to broaden their scope — what Johann Gutenberg accomplished is a turning point in history. True, the first book he printed was the Bible, followed by other religious books thereafter; true, he tried to imitate existing illuminated manuscripts so as not to antagonize the monks who produced most of them; and true, no book bears his name as the printer, nor is there known any genuine likeness of his face, and he died debt-ridden in obscurity.

But the floodgates were opened.

The invention spread through the civilized world like a prairie fire on a windy day in August. Nobody knows how many books, periodicals, pamphlets, brochures, ephemera such as Yazoo & Mississippi Valley timetables, etc. (or even LSU Catalogs) have been printed since Gutenberg's day.

How many human beings with some undying thought inside them, in every country on this globe, have expressed these thoughts in writing? The sheer volume of printed words that have deluged mankind since the early 16th century is a phenomenon which gives anyone interested in books and bibliography and their orderly assimilation into our modern society for educational or intellectual purposes, a good case of goose pimples. This inelegant metaphor recalls an early serendipity experienced 30 odd years ago when I found that this first printer assumed his mother's name because he didn't like his father's, which was Gansefleisch or goose flesh in English.

Maybe it's easier to visualize the modern day library problem with a quick look at a small part of the current flood: from daily racing forms to the Baton Rouge *Morning Advocate* or the *State Times* or

the *Congressional Record*; from a slim book of beatnik verse to Truman Capote's *In Cold Blood* or how many volumes about JFK; from a new edition of A. A. Milne's *When We Were Very Young* (take even *Winnie Ille Pu*) to the *New English Bible* recently issued in London and New York by the Oxford and Cambridge University Presses jointly in a first edition of one million copies — a second edition of 500,000 copies and more already on the presses — to replace the 1611 King James version; from the *Atlantic Monthly* or *Harper's* to *Life* or *Look* or *The Saturday Evening Post* or *Time* or *Newsweek*; from Ph.D. dissertations at LSU to New York State Regents' Exams.

Now let me give you a few figures. I shall not indulge in too many plain statistical data or fuzzy and misleading averages. Why risk such dullness and the possibility of selecting the wrong figures to prove a point? After all, you've heard of the eminent doctor lecturing at a downstate institution who so learnedly gave out that Tulane graduates averaged 2.8 children and Newcomb graduates averaged 2.3 children caused the audience to deduce that men have more children than women. Nor shall I cite the bride in her new kitchenette, alternating between burnt fingers in the oven and chilblains from the deep-freeze, who was "on the average" quite comfortable.

So, wherever figures are used, please bear with me. They are needed to help build the image of ever-increasing services rendered to communities and/or institutions by the diligent and dedicated librarian.

Maybe it's easier to visualize one aspect of the modern day librarian's problem with a quick look at just a part of the current flood. Today we are producing and selling in the United States more than one billion and a quarter books (hard-bound and paperbound) representing $2 billion. Of the total, some 50 percent, about $950 million, represent sales of textbooks, encyclopaedias, and other reference books; a good sign. We'll just skip the more than 500 million pamphlets and magazines, both popular and trade.

Fortunately for us, the readers, it's getting worse for the librarians! Compare 1963 with 1958. By unit sales, volume in adult trade books in hard covers increased 52 percent; for adult trade paperbacks, the increase was 183 percent, the largest in any category. In the same five years, the third and fifth largest increases were for juvenile books retailing for under $1, up 83 percent, and juvenile books priced over $1 were up 65 percent. Maybe at long last Johnny *is* learning to read.

Two other large increases between the five years were 59 percent for business, technical, and scientific books and 80 percent up for university press books, certainly a healthy trend. Of personal, not library institutional, significance is the increase of 63 percent for book club subscriptions and of 73 percent for paperbound books casually sold at newsstands.

Yet book sales of about $2 billion barely equal about three-tenths of 1 percent of our Gross National Product. And of the well over $20 billion being spent yearly for recreation by our affluent society, magazines, newspapers, and sheet music take about 12 percent, books only about 6 percent. So, we in this country cannot find any grounds for complacency if we want to be a really literate nation and not just spoon-fed by the other mass media of reviewers, columnists, and commentators. Only about one third as many American adults could say they were "currently" reading a book as compared to adults in Great Britain. Up to now, figures used represent all sales of books regardless of when written and first issued in the U.S.

As to individual titles, over 29,000 are being published in the United States, including about 23,000 new titles and 6,000 reprints; the same reporting publishers (1,115 of them, large and small on the current American scene) having already in print almost 150,000 active titles. Remember, please, these are only books — no pamphlets, magazines, or the like.

Many countries issue more titles than we do. In 1963, when our total was 26,000, India's was 17,500; West Germany's over 24,000; Japan's 23,000; Great Britain's over 26,000. Wonder why this last figure is footnoted "includes all of Ireland." Maybe the Irish don't dare print the stuff except in England.

Back in 1963, the USSR published some 79,000 titles with a footnote I don't quite understand that the figure included 32,000 for "free distribution as government propaganda," etc. — and very significantly, more than half of the Russian-produced books are presumably marketed elsewhere than in Soviet Union.

While mention has been made of only five countries, it should be noted that currently some 80 nations make reports on books published. I regret my own inability to locate any compilations (in units or dollar value) of how many foreign books, periodicals, newspapers, pamphlets, etc. of all kinds and types are brought into this country. There are many well-planned research library programs for importing this foreign printed material to satisfy our scholars, businessmen,

technicians, and ordinary readers. These programs are increasing every year as available funds will allow.

More important, especially for friends and users of books, is the intelligent planning, purchasing, and having available what an ever-increasing number of our citizens need as life goes on on this ever-shrinking planet. Fortunately, export of American books is mounting steadily as we realize the initial influence of our literature abroad. What a wonderful job Franklin Publications is doing.

More study ought to be done on where the over a billion-and-a-half books currently distributed in this country come to rest.

Here is some data at the level of higher education. There are in 1965 about 2,100 universities, colleges, and junior colleges in the United States. From a study of 1962-3, I computed there were something over 80 million volumes in the 50 leading private and state-supported colleges and universities belonging to the Association of Research Libraries and note in passing that all forms of microtexts are excluded.

A quick closer look at libraries attached to great centers of higher learning is to me significant. Just about 100 years ago, Thomas Carlyle said, "The true university of these days is a collection of books." He wrote that in the full surge of the capitalist ideology when so many great private collections were beginning to be formed. The discriminating collector saw in his library, not just a tangible proof of wealth in intellectual form, but rather almost always a means of enhancing educational opportunities for their fellow men.

Even before Carlyle, to name but a few, there was Sir Thomas Bodley (Oxford) and Cardinal Mazarin (Sorbonne) who were shrewd collectors; John Harvard and Elihu Yale, who were shrewd donors. That the names of so many great collectors, or of erudite bibliophiles, are today academically connected is ample vindication of Carlyle's statement.

In this century alone, the capitalist insistence (with some little help from tax legislation) upon greater availability of rare books, first editions, and manuscripts to more and more people has produced Huntington, Morgan, and Folger, who endowed the people; Widener, Stirling, Clements, and Hoover, who benefitted great universities; and Andrew Carnegie who gave the greatest single private encouragement to public libraries. Where would research be without such men? And all of them surrounded themselves with staffs of competent librarians who did much more than act as "bookkeepers."

Fascinating as they are, time does not permit full elaboration of public library statistics. Yet, two sets of data are very revealing. In 1962, some 40 percent of public libraries serving populations of over 5,000 were below the American Library Association standards; another 40 percent just met the standards; and only 20 percent exceeded ALA standards.

In some 7,000 public libraries reporting, we find that 10 percent of them are open less than six hours per week; 20 percent up to 12 hours; 45 percent from 13 to 42 hours; 25 percent from 43 to 72 hours; less than 1 percent over 72 hours. As to college and university libraries, only 2 percent are open less than 35 hours per week; more than two thirds from 50 to 80 hours; and about 20 percent are open at least 12 hours a day, 84 hours or more a week.

These figures, by themselves, give food for thought. How much service is really being given to the taxpayer? Is this another example of insufficient use of a tax-supported community asset of inestimable educational, intellectual, and economic value?

It is imperative that a library, academic or public, become a social force in the community; a substitute for the boredom and idleness of the drugstore, pool parlor, or the park bench. Part of the answer is more and better-trained librarians. This you are certainly doing well at LSU.

The library must compete with radio and TV commentators and synidcated news columnists, in the struggle to help our youth and adults, do some thinking for themselves, if we are to remain a really free nation.

Try to compete for some of the ever increasing leisure time in an era of decreasing living quarters and lesser recreation area. Earlier I quoted: "Nobody who can read is ever successful at cleaning out the attic." Please, remember how few attics are left today; so you must, if possible, substitute a congenial library atmosphere, including records, tapes, and the like, which are easier on the eyes and might even attract the slow reader.

All of these, and many more devices most adaptable to your community and/or institution, go hand in hand with what teachers and professors are trying to accompish. To reinforce *you* who are already on the firing line, our library schools should be encouraged to produce not just masters of the Dewey decimal system and penny snatchers from tardy book users but a breed of special individuals

with imagination and special training, a training which includes the ability to appreciate the needs of group projects and to devote sympathetic skill to the problems of those who best work alone in the rare atmosphere found only in libraries.

If *he* will but identify it for the community, there is a place for the alert librarian in *every new* development which forms part of our growing recognition of the educational and cultural problems stemming from the advancing tidal wave of the population explosion.

Educational TV is burgeoning. The student may see and hear something new explained on TV, but he has to go to books and libraries to get the basic facts and *all* the background for the TV program to be most meaningful. For review or support, the student, now, later the politician or still later the historian, must go back to the library for reference or research if he but *heard* on radio or TV the President's Inaugural Address or any other important public pronouncement, such as the "Mississippi manifesto" or "Cuba policy declaration." The conscientious and dedicated librarian quickly puts a copy of the Monroe Doctrine on the open reference table or shelf and may even have extra photocopies available for the history and social study classes. You must be a day-to-day expert on current events to keep a library useful.

Speaking of American historical documents of the past, your place in the community is further highlighted by an interesting survey recently made by a national magazine of school history books issued before 1920, compared with those issued since. Nathan Hale said, "I regret that I have but one life to give for my country" in 11 of the old and in only one of the new texts. Patrick Henry said, "Give me liberty or give me death" in 12 out of 14 earlier books and in only two of 45 recent ones. But John Paul Jones set the record. He said, "I have not yet begun to fight" in nine of the old books and in none of the new ones.

Now a word more specifically about the academic world. At the university level, college and post-graduate, much remains to be done. The key word is research without sacrificing ready availability of standard reference material. If the broad purpose of education, particularly higher education, is to pass on the facts, logic, and general knowledge of the past for mankind ever to improve its individual and mass accomplishments, the tools must be kept sharp and available.

This means a certain amount of our attention must be focused on

the frontiers of knowledge—the "cutting edge" of education which is research. If our big public libraries are excluding University students in bulk, then let the academic libraries start now to separate the reference from research collections, make many more reference books easily accessible on shelves in separate reading rooms, and let research gain more space and better servicing by new construction.

If state and private college libraries can do this, so can the public libraries with state aid if we are really serious about *quality* master plans for higher education—including good research with an effective cutting edge.

We know what we need in this country, in arms for defense, in industry and commerce to build the Gross National Product, and in education to insure a national well-being strong enough to withstand the vicissitudes of a world struggle between two ideologies. No small part of this struggle is itself taking place on the very fringes of human knowledge and know-how from day to day. Here is research in its most urgent and pragmatic form. In this aspect of modern education, there is no quarter. Teachers and students alike must have at their disposal the best that man has to offer. Every university president — and every governing board — must worry now about quantity and quality of the instruction and of the student he will produce. Good universities, capable of fruitful research on the frontiers of knowledge, are the ultimate goal of our educational systems.

Finally, let us not forget that our libraries, public and private, each have developed specialties in which they are strong. This should be fostered, especially as regards ephemera, or they will all fail for lack of space or money or both. Modern devices of communication, reproduction, and preservation all help to economize in dollars and in space. We must husband the past, present, and future resources of our libraries. Competition for completeness is folly.

Research on important projects is best done in comparative solitude, but it is not a momentary phenomenon. It can be planned in advance and the more that is available for a given project in one place, the more efficacious. Samuel Johnson wrote: "A man will turn over half a library to make one book." And a single book, like *Das Kapital* or *Mein Kampf*, can have an impact far transcending a college course or a tutorial seminar. That's why I disagree with a very prominent government official, who recently said that libraries would probably become extinct and predicted borrowing a book by dialing a central respository from the living room at home and reading it on a closed-circuit remote-control TV system.

Let me wind up this emphasis upon the library's responsibility toward research by quoting from a good friend, my distinguished classmate, Nathan M. Pusey, President of Harvard:

> Knowledge old and new lives and is mediated through books. Within them is stored for future use the intellectual capital of the race. Again and again they serve as catalytic agents prompting fresh intellectual discovery. Without books — many books— a university could not attract, nor provide for, nor keep scholars, nor could its surrounding community grow beyond a limited and impoverished manner of life. Today the flood of books in countless languages pouring from the presses of the world recording the experiences, hopes, discoveries, plans of peoples everywhere, is larger than ever before, and a research library to be alive must grow with this torrent. Somehow in our universities we must keep up with the full flood — not each of us with all of it, but together, dividing the burden in some sensible manner, with all that can be shown to be relevant in our broadened and broadening world of learning.

Taken as a whole, "libraries are *certainly* more than books." Our libraries are the treasure houses of man's accomplishments and failures, his greatest expressions of hopes, fears, joys, pure scholarship and pure recreation. They are the modern citadels in which the thoughtful leaders of the future can, in serene solitude, develop and achieve the true freedom of mind, of self-determination, of self-expression, and of fresh creation.

Libraries are the archives of cities, states, and nations. They are the repositories of history, of the restless human mind seeking understanding, searching, developing, swaying, and influencing others. They are the custodians of valuable tools to shape the minds and hearts and stimulate the reflexes of our youth, and they are instruments to brighten the lives of our "senior" citizens.

I hope, as we make progress, every trip to a library, large or small, public, academic, or private, or even to a bookshelf in a fishing lodge, becomes an exposure to some exhilarating new experience, an "adventure in serendipity."

If I appear prejudiced — not too intransigently, I hope — in favor of libraries being given greater emphasis and support as an important means of educational and intellectual stimulation for the future, it is only to bespeak intelligent consideration and able cooperation in the difficult years ahead from you who with me believe that "libraries are more than books."

Thank you all so much for letting me address you today.

The Trend to LC

Thoughts on Changing Library Classification Schemes

BY EDWARD G. HOLLEY

That I should pose as an expert in cataloging and classification is in many ways very peculiar. In 17 years as a professional librarian I have never been a cataloger nor have I ever supervised a technical services department. Moreover, the pose of "expert" would surely come as a shock to a former professor of mine at the University of Illinois. I well remember my first encounter with this individual who is genuinely knowledgeable in the field of the history and theory of classification systems. Fixing me with a glassy stare, she boomed, "I guess you know, Mr. Holley, that I voted against your admission." An unusual way to begin one's relationship with a distinguished professor, and I trust that none of you students at LSU have had similar traumatic experience in your first encounter with the faculty.

As a sequel to this anecdote, I might add that I later completed two of the professor's courses successfully. However, I still claim no particular expertise in classification. My basic knowledge in this area rests upon my experience as an administrator of a rapidly growing university library, where I have been forced to devote a great amount of time and attention to our assimilation of large quantities of library materials. No administrator who triples his book budget within a three year period and sees the rate of acquisitions rise from 18,000 volumes per year to over 40,000 volumes per year can be unconcerned about

The fourth lecture was delivered on May 13, 1966 by Edward G. Holley, Director of Libraries, the University of Houston. Dr. Holley holds a B.A. degree from David Lipscomb College, a M.A. from George Peabody College, and a Ph.D. from the University of Illinois. He is a member of Kappa Delta Pi and Beta Phi Mu and the recipient of the American Library Association's Scarecrow Press Award for his "outstanding contribution to library literature in 1964." Dr. Holley is the author of Charles Evans, American Bibliographer *and numerous articles and papers relating to the library profession.*

the efficiency and costs of processing. My own situation is not unusual, for there are many smaller universities and some teachers colleges which are faced with burgeoning enrollments, changes in curriculum, and expansion of graduate programs. Branches of large universities such as Wisconsin at Milwaukee, Illinois at Chicago, and your own LSU at New Orleans are in a similar position. We have been faced with the prospect of creating almost overnight library facilities to support research activity where little or none has existed before. Therefore, we have had to be concerned with how this can be accomplished effectively, economically, and quickly.

One of the first problems, then, which confronted me at the University of Houston was the question of reclassification. The University of Houston is a relatively new university, and its catalog has none of the deficiencies of those 19th century collections with handwritten cards and cataloging which does not meet present-day standards. Most of our catalog cards are LC printed cards. So recataloging was not a problem. Yet over the past decade the library staff had been encouraged to develop very expensive adaptations of the Dewey Decimal Classification, especially in the science areas, to meet objections of the faculty. Too, the changes in the various editions of the Decimal Classification meant that the Catalog Department necessarily had to do some reclassification anyway. We were all well aware that the Dewey Decimal Classification was not a satisfactory system for a large library and that further compromises would undoubtedly be expensive in terms of staff time. This seemed particularly depressing in view of an anticipated shortage of catalog librarians. In 1962 the University of Houston still had a relatively small collection (some 150,000 volumes in the Dewey classification, and 243,630 volumes altogether) but we did expect to double the collection by 1970. As an administrator I was unusually fortunate in having a catalog librarian who had foreseen all of the problems of growth and had recommended in 1956 that the classification system be changed. It is somewhat ironic that my predecessor, who turned down the proposal then, has recently become a strong advocate of the LC classification.

There followed a couple of months of investigation and study of the literature, then a recommendation to the University Library Committee, and a formal proposal to the University administration. The Staff Conference gave formal approval to the idea of conversion to LC on February 28, 1963, and on March 1, 1963, we began classifying all new titles by the LC classification.[1] I might add that the initial

reluctance to change at this point came not from the technical service but from the public service librarians.

My own administration and I found particularly appealing the statement of Dr. Archie L. McNeal as quoted in Bentz and Cavender's excellent article on "Reclassification and Recataloging," in the October, 1953, issue of *Library Trends*:

> When the vice president raised the question of reclassification, I was not unprepared to discuss it. His reaction was to the effect, "If it is desirable and is something we will eventually come to, let's begin it now." I pointed out the difficulties involved, the expense, and the handicaps to service. On the other hand, as a result of the purchase of a major library about two years prior to my coming here, there was a backlog of 20,000 to 30,000 volumes to be cataloged. It seemed to me an opportune time to undertake reclassification, even though no extra funds were available for it either from foundations or from our own institution.[2]

Within Dr. McNeal's statement are the germs of the main reason for changing from the Dewey Decimal Classification to the Library of Congress Classification economy and efficiency, especially as they apply to reducing a large backlog of unprocessed materials.

More than 20 years ago Dr. Maurice F. Tauber, unquestionably the leading authority in this field, noted that most librarians assumed the main reasons for changing to the Library of Congress were:

1. That the use of the new classification achieves a grouping of books in the collection that is of greater educational significance and shows to the users the currently accepted relationships among the branches of knowledge more effectively than did the system being replaced;
2. That the adoption of a new classification will reduce the costs of technical processes.[3]

One of Dr. Tauber's students, Annette L. Hoage, did a doctoral thesis on the use of the LC classification in 89 academic libraries in 1961.[4] Her thesis confirmed Dr. Tauber's original observation about librarians' assumptions. She noted three characteristics mentioned by 91 percent of the respondents to her questionnaire:

1. The subject approach is acceptable to users.
2. It reduces administrative effort and production costs.
3. It is up-to-date.

There seems little doubt that most libraries which have converted have done so primarily because of Tauber's and Hoage's reason number two: lower processing costs. This refrain appears repeatedly in the literature and has been seriously challenged by only one writer: Dr. Robert B. Downs of the University of Illinois. Dean Downs at the Allerton Park Institute on *The Role of Classification in the Modern American Library* accused librarians of "wasting millions of dollars in elaborate and unnecessary reclassification programs, using funds that could have been spent to far greater advantage to everyone concerned in building up their book resources."[5] He cited specifically two of the most poverty-striken university libraries in the country, the universities of Mississippi and South Carolina, for expending tens of thousands of dollars on reclassification when their book budgets were about the level of a good college library. In the case of South Carolina the average cost of $1.69 per title for reclassification does seem high, but then South Carolina is the only sizeable academic library to my knowledge which has changed from an older classification (the Cutter Expansive in this case) to Dewey rather than LC.[6]

Mississippi received a grant of $45,000 from the General Education Board for a three-year reclassification project beginning in 1953.[7] Since this project was initiated by the administration and the liberal arts faculty one wonders if this sum would have been made available for books instead of reclassification. Dean Downs has a point but I think he overlooks the long-range economies possible with the adoption of LC.

Accurate estimates for reclassification projects are difficult to come by. As Bentz and Cavender noted over a decade ago "too little has been written on the solutions individual libraries have found to the problems,"[8] although renewed interest is now providing additional articles. When Cornell changed from the Harris scheme to the Library of Congress, Tauber estimated that the overall cost for 800,000 volumes would be in excess of $600,000.[9] However, in an article surveying the Cornell project Reichmann points to expenditures of additional funds of only $180,000 through 1962.[10] A recent report of the Director of the Cornell University Libraries mentions a further special grant, amount unknown, to complete the reclassification within another five and one-half years.[11] Even if the new grant is sizeable, it seems doubtful that Cornell will have spent more than half the amount originally estimated.

More recently an Ad Hoc Committee of the University of Oregon

Library staff estimated that their reclassification to LC would cost only 20 cents per title, while continuing with Dewey would cost $1.26 per title.[12] I assume that the Oregon committee is talking about classification *per se* and not about any recataloging that may have to be done. Incidentally, the recataloging of an older library will run up the costs significantly. I understand recataloging has been an especially time-consuming problem at Washington University at St. Louis.

The University of Puget Sound estimated the cost of Dewey classification at 42½ cents per title versus six to nine cents for LC.[13] Twelve years ago the State University of Iowa kept careful statistics on its reclassification project and estimated the cost at 45 cents per volume.[14]

Oregon estimated that the costs for *both* reclassifying their million volumes *and* adopting LC for the new acquisitions would be about the same as the amount spent for continuing the Dewey Decimal Classification over the next decade.[15] Although we have not made any cost estimates at the University of Houston, I find the Oregon estimates reasonable. A superficial analysis of our own program over the last three years leads me to the conclusion that we are probably spending only about two thirds the $30,000 per year we estimated it would cost to reclassify our collections over a seven-year period. We are certainly not spending more than 2 or 3 percent of our total annual budget on reclassification at the present time.

One of the real problems in discerning costs is to decide exactly how much keeping the Dewey Decimal Classification will cost in the future. In defense of Dewey Mr. Benjamin Custer makes a point that, although Dewey numbers appear on only about 35 percent of LC cards, this category constitutes 80 percent of all the cards sold by LC.[16] As a retort to this I want to note that the Decimal numbers on LC cards are made-up numbers not based on an actual collection and are suggestive only. They can seldom be used as they appear. Over the years there have been considerable revisions in Dewey and the numbers given must be checked against the particular edition of Dewey your library is using. With the various revisions of Dewey some reclassification becomes imperative anyway. More importantly, time must still be spent assigning Cutter numbers for a Dewey classification. A number of these points are dealt with in "Statement on Types of Classification Available to New Academic Libraries," prepared by the Classification Committee of the Resources and Technical Services Division of ALA in 1964.[17] I repeat the above only for the sake of emphasis.

Assuming, as Tauber says most librarians do, that the Library of Congress classification is both more efficient and more economical, why is it that academic libraries have been so slow converting to its use? Despite Mr. Daniel Gore's animadversions that the insecurity or stupidity of librarians are at fault in this matter,[18] I think there are probably two main reasons for the lack of a stampede to LC up to this point. One of them has to do with history and the other with finance. There is a subsidiary reason to which I shall also refer later which has to do with the quality of cataloging and classification.

When the American Library Association came into existence in 1876, the cataloging and classification of books were vital topics. Indeed the anonymous correspondent in the London *Academy* who sparked the efforts of Dewey, Leypoldt, and Bowker for a library conference made a detailed suggestion about the desirability of centralizing the cataloging of books on a national level.[19] From the British Museum might go forth printed slips for English books, from the Bibliotheque Nationale slips for French books, etc. A national bibliographic bureau was in the minds of many librarians who descended upon Philadelphia in October, 1876. At that point there were a variety of classification schemes and all the early ALA conferences had discussions of which one should be adopted.

Another library landmark that year, though, was to answer this question for most libraries within the next 25 years. Melvil Dewey's *Classification and Subject Index. . .*(2nd through 14th editions bear the title *Decimal Classification and Relativ Index*), published late in the year, was to sweep the field of classification, particularly for public libraries, but for most smaller academic libraries as well. That Dewey's scheme had undoubted virtues, especially its logical arrangement and mnemonic system, one can well believe, but it also had the added virtue of being promoted by one of the most colorful and persuasive figures ever to adorn the library scene.[20] Despite the opposition of William Frederick Poole and some of his proteges, one of whom called it "that detestable Dewey system of notation,"[21] Dewey's Decimal classification swept the field, and by the turn of the century had been widely adopted by all kinds of libraries. The few holdouts were large academic libraries. When Dr. Thelma Eaton published her survey of the classification system used by 744 college and university libraries in 1955 she discovered that 84.6 percent used Dewey, 13.8 percent used LC, and 1.5 percent used some other scheme.[22] I suggest that the more than 25-year lead held by Dewey

over the Library of Congress had much to do with the overwhelming number of libraries using the Decimal classification.

The Library of Congress in the late 19th century could gently be described as a "mess." Cataloging and classification had virtually ceased long before the move into the new building in 1897. Books had come in so fast that they could not be processed, and consequently covered the stairwells and every other nook and cranny.[23] During the period between 1876 and John Russell Young's arrival in 1897 there was neither room nor staff nor funds for a reclassification, or more properly, a classification project. Young's all too brief librarianship merely set the stage for his successor. Putnam, faced with utter chaos, began the classification of the million-volume collection. To help him he had a staff of brilliant young men including Charles Martel and J. C. M. Hansen who had been employed by Young in 1897. These young men built the LC classification upon a structure which Charles Ammi Cutter had founded. As they developed the classification, it was designed to be a pragmatic and expansive scheme for the use of an extremely large library. Because A. R. Spofford was still around and didn't think much of decimals, there were few decimals in the early schemes.[24]

Some libraries and librarians immediately saw the importance of this new classification scheme. Rice Institute from its beginning in 1912 adopted LC and the University of Chicago, where Hansen had just gone, changed from Dewey that same year. However, the first real movement for reclassification came in the middle 1920's when the printed schedules were readily available to the public. Texas Technological College adopted the LC classification at its inception in 1925. Michigan (1923), Brown (1924), Iowa State (1925), Clemson (1926), Emory (1926), and Notre Dame (1927) were among the university libraries changing to LC in the twenties.

Another movement began in the mid-thirties with Virginia (1935), Catholic University (1936), Georgia (1940), and some smaller colleges involved. After World War II and into the early fifties still another movement was initiated by such large libraries as Washington University at St. Louis (1947), Boston University (1948), Cornell, (1948), Iowa (1950), Rutgers (1950), Tennessee (1950), Miami (1952), Mississippi (1953), and Wisconsin (1954). Some of these changes were from less well known schemes such as the Harris at Cornell or the Cutter at Wisconsin, rather than just from Dewey to LC.

Late in the fifties and early in the sixties there has been still another movement toward reclassification which has steadily gained momentum. Some major universities such as Colorado (1958), Toronto (1959), Missouri (1960), Maryland (1963), Oregon (1964), and many smaller colleges have begun reclassification. Each succeeding movement has gained strength, and the sentiment for conversion to LC now seems stronger than ever, despite Dean Downs' admonition. Indeed, to my very great surprise I learned at Midwinter that even the University of Illinois is considering a change. From subsequent reports I know that the technical services directors of a number of large universities met at Midwinter to consider this problem.[25]

It is now obvious that there have been or are impending substantial changes in the national bibliographic picture. The fact that centralization of bibliographic processing through automation is closer to reality than at any time in the past century is a strong impetus against continuing one's provincial ways. Under these conditions it will become imperative that large libraries consider how they may be assimilated into a national network. Not surprisingly, therefore, many academic librarians are considering the LC classification as it affects the future of their libraries. The Cataloging and Classification Section of ALA has just announced that there will be a pre-conference on the use of Library of Congress classification July 7-9, 1966. At a recent conference, I heard Dean Jesse Shera observe that the time appears not far distant when library schools will teach LC as the major classification and Dewey as the minor.

So much for history. The other major reason for the lack of change has been the problem of funding. During the years when academic librarians lived in a less affluent society, the problem of how to finance a reclassification project was not to be taken lightly. Too, the LC printed catalog (available only since 1942 and at considerable cost) and many other useful tools like the Se-Lin labeling machine and the computer had not come into existence. In recent years academic librarians could look at Washington University at St. Louis or Cornell which have been reclassifying since 1947 and 1948 respectively, and are still not finished, and wonder if they wanted to engage in a similar long-drawn-out venture. Neither Cornell nor Washington had very much in the way of extra funds, especially in the early years of their projects. One can well appreciate an administrator who asked himself, "Can my library afford the disruption of a reclassification project which lasts a quarter of a century?" Such

examples give force to Dean Downs' criticism of reclassification at the expense of building resources. After all, I have just read that the Enoch Pratt Free Library in Baltimore has asked the City Council for a $2,000,000 loan to reclassify their collections over a 10-year period.[25] While I don't want to be unkind, it's a long, long way from Mr. Gore's 20,000 volumes in a small college in North Carolina to the almost two million volumes of the Enoch Pratt.

On the other hand the differences between 20 cents and $1.26 per title can scarcely be ignored either, especially in a period of rising book budgets and an ever increasing flow of volumes into academic libraries. If Title II of the Higher Education Act of 1965 ever does get funded, acquisitions in academic libraries will increase at an even more rapid rate than they already have. No administrator can ignore the implications of continuing with a time-consuming and expensive classification system under these circumstances.

There is a subsidiary reason for not reclassifying which some administrators reject out of hand. The economy of LC classification depends largely upon using the LC number *as it appears on the card.* There is little to be gained in changing from Dewey to LC if one is to tamper with the new scheme. Although I can, as an administrator, defend this point of view, I tend to agree with one of my staff members who noted recently that the use of LC represents a compromise: we accept less in the way of cataloging and classification than we would have accepted in the library profession at one time. There is no question that both Cornell and Washington University are improving the appearance of the catalog by eliminating cards written in "library hand"; they are also eliminating some analytics and reference cards which their reference librarians give up with reluctance. One could add that commercial and governmental indexing services are taking the place of reference cards and the analytics which each library once made for itself, but this is not entirely comforting to those who look upon the card catalog as the library's major reference tool. At the same time we are reducing some of the older catalogs' effectiveness, the LC classification forces students to use the catalog more. Still we come back through to the two arguments which carry much weight with administrators: LC is a partial answer to mounting costs and it provides greater flexibility for a large collection.

Now I want to turn to the pattern of reclassification as it has developed in recent years, and then take a brief look at the project

at my own institution. After reading the literature, visiting some libraries where reclassification is underway, and experiencing three years of such a project, it seems to me that four types or patterns have emerged.

First there is the small academic library which is undertaking reclassification in increasing numbers. Generally the changeover is a quick and relatively painless process, often less than a calendar year. Typical of these libraries is Del Mar College in Corpus Christi. Del Mar decided upon a crash project for changing its 40,000 volumes. Making labels for pockets and spines from the shelf list, a corps of workers then changed the numbers on the books as they stood on the shelves. Then the cards in the catalog were changed. For part of the time the public catalog was not accessible. Such an approach has the obvious drawback of placing the public catalog in limited service for the period of the reclassification but may be endured when the collection is small and the project of short duration.

Similar in approach, with the use of additional staff and a computer, was the summer, 1965, reclassification project at the State University of New York at Albany.[27] Since machines did most of the work, it was possible to reclassify Albany's 100,000 volumes within a three-month period. I might also add that Albany had a backlog of almost 80,000 uncataloged volumes, a characteristic mentioned by a number of libraries when they began their respective projects. Again, most faculties and students would not be very happy at having no access to a university's collections, even for a short period of time. Only against a background of inadequate housing of library collections and a breakdown in the processing operations could it normally be justified.

Trinity University in San Antonio is another smaller university which has embarked on a crash project. Theirs will last an estimated six months and encompass 100,000 volumes. The University of Maryland, with a much larger collection, had intended to have a two-year crash project but was forced to go more slowly because funds were not available.

The second approach applies to the medium-sized university library where the original intent is to classify all new acquisitions and eventually reclassify the entire collection by LC. Many of us fall into this category, including such nearby institutions as the University of Southwestern Louisiana and Arlington State College. We share in

common rapidly expanding enrollments, greatly increased book budgets and relatively small collections at the time of conversion. Most of us recognize that we will eventually be million-volume libraries and that we should be planning for that now. Generally such medium-sized libraries expect to handle their increased acquisitions and to reclassify the old collections within five to seven years. There may or may not be a separate staff for reclassification and a separate budget for the initial project. At the University of Houston we do have three full-time clerical personnel who do most of the reclassification, and the project consumes approximately half the time of a professional cataloger. This may seem small, but continuing projects seldom have large staffs. Also, we received additional funds in the amount of $19,400 for the first year and $23,000 for the second year of our project. Arlington State on the other hand had no additional personnel nor any additional funds.

The third type is that of the very large library which does not plan to reclassify the entire collection. The University of Missouri falls into this category. Missouri began reclassification with its reference collection and then proceeded to the sciences.[28] As each segment is reached, e.g. physics, the faculty is consulted as to which monographs ought to be reclassed. In the case of physics, Missouri will reclassify only those books published after 1946 unless a book prior to that date circulates. Such a book will be reclassed upon its return. Currently received serials are, of course, reclassed. Eventually Missouri expects by the process of elimination to determine what books have not been used and these will never be reclassed but put in dead storage and retrieved through the Decimal classification system.

There is a fourth pattern now under consideration. Because of the desirability of connecting with the Library of Congress in a nationwide network, some large libraries may change to LC but leave most of their collections in the present classification scheme. A book catalog could be published for the existing collection, thus giving access to the older collection and the library could place these volumes in stack-storage. A large library could begin all over again with a new card catalog, or possibly a computer tape catalog. Frankly, I foresee a number of difficulties with this approach. Of necessity a library will have to reclass a great many older volumes which are in constant use. Moreover, the serials problem in universities subscribing to some 15,000 to 30,000 titles will be immense, although in the case of long runs of bound serials reclassification proceeds rapidly. Un-

fortunately, one may bog down for months on a section of esoteric serials as we discovered with our excellent geology collection. Perhaps there is no easy solution to the question of conversion to LC for the larger libraries. Automation will help; better methodology and a large staff will also be useful. Perhaps the best comment which I can make is that we have come a long way from the time when reclassification was considered a luxury. Obviously many librarians now believe it is a necessity.

These are, it seems to me, the patterns. No one method has been adopted by all, and, again unfortunately far too few libraries have written up their experiences. For the benefit of some of the librarians from smaller schools and the students I should now like to turn my attention to the practical criteria used for our project at the University of Houston and make some suggestions for improvement.

In the initial statement to the faculty I stressed the fact that the advantage of conversion to LC lay primarily in accepting the classification number as it appears on the card.[29] Upon this basic premise all our planning and staffing have been developed. Fully 80 percent of our current monographs are never seen by professional catalogers. While we realize that this percentage will decrease as our acquisition of foreign publications increases, we still expect the majority of our books to have LC cards. We have well-trained clerical personnel who not only do the basic classification and reclassification, but who revise each other. Only in the case of a variation from the Library of Congress card does a cataloger see an incoming book in our library. If one is really interested in economy this principle of accepting the LC number as it appears on the LC card can scarcely be overemphasized. The late W. C. Berwick Sayers noted that librarians are seldom able to leave classification systems alone, but added that "changes are often unskillfully made and the advantages they give are not always so great as their authors imagine."[30]

Having agreed with Mr. Sayers and having said this dogmatically, emphatically, and irrevocably, I still find that there remain a few exceptions that one has to make. No classification system is perfect. However, it is not with any idea that we are improving upon LC that we have had to consider seriously three sections. If one has a divisional library, the provision of LC for subject bibliography is almost impossible to defend since it goes alphabetically from aeronautics to zoology. Because we want to keep the Z numbers for the sake of

automation, we are currently planning a series of location devices for subject bibliography which will place such books in the divisional reading rooms with the subject, while still keeping the basic LC number. National and trade bibliography present no problem since they will be housed in our Evans Bibliography Room. For a library with centralized reference the Z class might work acceptably as it stands (although I still admit being disturbed at funerals being next to furniture).

Early in the process the librarian needs to decide what to do about PZ, fiction and translation of foreign literatures. We have decided that we will place all fiction in the literature numbers and that translations of foreign literature will appear with the original. This is such a minor part of our annual intake that it doesn't present much of a problem. PZ5, juvenile literature, is used for our separate children's literature collection.

More serious may be the problem of law books. While LC does place a number of routine titles in the J class, there is as yet no K class although it has been expected for lo these past five or six years. Until class K does become available, we are continuing to put the law books in the 340's. (The problem of a classification for the 45,000 plus volumes in our Law Library is yet to be resolved.)

Occasionally we have been under pressure to change some classes. We began using a location device for Education but later dropped this. The Education faculty are not happy that LC distributes methods books with the subject. However, since our teacher training program for secondary teachers is lodged within the College of Arts and Sciences it makes a great deal of sense to follow the LC pattern. Dr. Tauber in his 1949 lecture at the University of Tennessee listed certain other subjects that present difficulties such as anthropology, geography, political science, psychology, and theology.[31] I would add oceanography and some aspects of geology. However, we have not made any variations for the subject disciplines. We hope that our new building addition will make the collections so much more convenient to use that complaints will be at a minimum. We are aiming at an integrated collection of books for all departments and not for specialized use.

In line with the above statements I should like to stress the importance of public relations. It is good to inform the faculty, students, and others on the campus the reasons for conversion. Although we

published the reasons in detail at the beginning of our project, we have discovered a need to keep the campus informed of developments. We have been careful not to encourage false hopes about an early conclusion to the project. Especially in the early days of the project there will be contingencies that one did not expect and progress will be slow. Two years after our change I noted that the number of volumes reclassed per month (then about 1,200) was less than we would like but about what we expected. More recently our rate per month has risen to 2,000 and we expect this to continue. As of May 1, 1966, we had reclassed 38,862 volumes out of the 150,000 we originally expected to change. As a side note to administrators, I suggest allocating extra funds for binding, since reclassification will present an excellent opportunity to bind materials that should have been bound years ago.

The reclassification project at the University of Houston did not actually begin until more than a year after we began the LC classification of all new titles. During that period we carried out a pilot project on the mathematics collection in order to identify some of the problems we would encounter later. Our basic guidelines for conversion to LC were:

1. When the library does not have a title already, we classify the volume or volumes by LC.
2. If the library already has a copy of a title or a different edition of a title, we pull the old copy or edition and reclassify it at the same time. A consequence of this policy has been the reclassification of some of our most used materials. Because of the acquisition of several collections containing a number of duplicates we have reclassed more of the heavily used titles in education, history, and literature than we anticipated.
3. If a serial title has five or fewer volumes, we pull all these volumes and reclassify the set at that point. If there are six or more volumes, we continue to add in the Dewey number, thus saving long runs until our reclassification project reaches those numbers. In retrospect I think we might have made the arbitrary number ten instead of five.
4. We shelve our LC subject collections adjacent to their respective numbers in Dewey (e.g., 800 next to P) so that equivalent classes will be accessible to the public with the least confusion. Dewey is now the deciding factor on location. In our new space

LC will become the determining factor since by then over half the collection will be classed by LC.

5. We began reclassification with the 500's since they were most in need of reclassification. At the present time we have completed the 500's and all of the 600's except for the 650's. Some libraries begin with reference books (e.g., Missouri) and some with departmental libraries (e.g., Tennessee). We chose to leave our two small departmental libraries until last, but we do call in duplicate copies and old titles for reclassification. We will finish the 650's by the end of the summer and then begin on the 000's. We have been flexible about reclassing other sections such as the reference 920's when it seemed desirable to do so.
6. Although originally planning not to classify the journals, we have recently decided to do so. We expect the project of classifying all journal titles to be completed by the time we move into our new addition in the late fall. This will represent some 40,000 volumes. I suggest an early decision on the classification of periodicals.
7. Labeling and pocket pasting can be annoying and time-consuming bottlenecks. We have now happily resolved both problems with two Se-Lin machines and an automatic pocket paster. One could produce pockets and labels with the computer if sufficient funds were available and time more pressing.
8. Decide early on the type of catalog. Will you interfile the new cards with the old in the same catalog? What about developing a divided catalog? It's an excellent opportunity to consider the future of your catalog carefully. We are producing catalog cards on the Xerox 914. At first we tried using LC proof slips, were concerned about cost of filing, and dropped the subscription. Now that LC cards have increased in price and we are buying larger quantities of current domestic imprints we are going back to the proof slips. For the reclassification we erase the call number on either the shelf list or the main entry and reproduce all the cards xerographically, using perforated, pre-punched card stock. At the same time we are providing a main entry card for catalogs in each reference division.
9. The serials cataloger will always see the serial titles since one can never say with assurance that the LC card fits the title exactly. Nonetheless much of our serials work is done by a nonprofessional serials assistant with help from the serials cataloger.

10. U.S. Documents will be placed in our Documents Collection by the Superintendent of Documents classification as the reclassification progresses.

I would not want you to think that any of the above is necessarily original with our staff. We found especially useful the University of Maryland Report "Reclassification Planning at the University of Maryland," April 22, 1963. Also, my catalog librarian visited Maryland, one of our catalogers spent a couple of weeks at LC, and two other staff members visited Missouri, though on other business. I myself had seen the Missouri operation and was much impressed with that project. Travel funds spent to orient the staff to a reclassification project in another library will be money well spent. In retrospect our basic guidelines seem sound, despite some variations as we went along.

Since we changed to LC and announced our conversion publicly, scarcely a month goes by without a letter from some librarian asking for specific information. Generally, the first question asked is, "Would you do it again?" There is not the slightest doubt that, given the same considerations existing at Houston when I arrived, we would make the same decision again. Whether or not I would have the personal courage to undertake the reclassification of a library of over half a million volumes, I'm not sure, but examples of such courage are not lacking. Perhaps the zeal for reclassification is similar to that of the religious convert; once you've got it, you want to pass it along to someone else.

Still, the attitude of watchful waiting which characterizes a number of professionals is similar to that of a lady about whom my maternal grandmother used to tell. There was a revival in a small country town in Middle Tennessee in which the evangelist was really lining up the audience. A lady who attended his services very regularly and sat on the second seat seemed to be enjoying the meeting, but she made no move to identify herself on either side. At length the evangelist felt constrained to remonstrate with the woman, and approaching her one night, he said, "Madam, you've been attending these services every night and apparently enjoying the messages. Yet you've given no indication of your own personal commitment. At this point I'm wondering just who's side are you on, the Lord's or the Devil's?" Looking the preacher straight in the eye and shifting her chew-tobacco to one side of her mouth, she replied, "I got friends on both sides." And perhaps that's the way it is with reclassification; there are many of us who "got friends on both sides."

References

1. Official announcement was made in the faculty-staff publication, *Acta Diurna*, 13:3-4, March 13, 1963; the proposal to President Hoffman was given in a seven-page memorandum dated February 22, 1963.

2. Bentz, Dale M. and Thera P. Cavender. "Reclassification and Recataloging," *Library Trends*, 2:253, October, 1953.
This particular article is an excellent review of the problems of reclassification up to the time it was published.

3. Tauber, Maurice F. "Subject Cataloging and Classification Approach the Crossroads," *College and Research Libraries*, 3:153-154, March, 1942; "Classification of Books in College and University Libraries; Historical Aspect," *Library Quarterly*, 12:706-724, July, 1942; "Reclassification and Recataloging in College and University Libraries; Reasons and Evaluation," *Library Quarterly*, 12:827-845, October, 1942; "Reclassification and Recataloging of Materials in College and University Libraries," *The Acquisition and Cataloging of Books*, W. M. Randall, editor. University of Chicago Studies in Library Science. Chicago: University of Chicago Press, 1940, pp. 187-219; "Reclassification of Special Collections in College and University Libraries Using the Library of Congress Classification," *Special Libraries*, 35:111-115, April, 1944; and *Technical Services in Libraries*. New York: Columbia University Press, 1954, Chapter XIII, "Reclassification and Recataloging."
Tauber has written extensively on this subject and his important contributions in the early forties represent the fundamental work on the problem.

4. Hoage, Annette L. "Librarians Rate L.C. Classification," *Special Libraries*, 53:484-485, October, 1962.
Annette L. Hoage summarizes the results of her Columbia University D.L.S. dissertation.

5. Downs, Robert B. "The Administrator looks at Classification," *The Role of Classification in the Modern Library*, Thelma Eaton and Donald E. Strout, Editors. Allerton Park Institute, No. 6. Champaign, Illinois: The Illini Union Bookstore, 1959, p.1.
The work is cited hereafter as Eaton and Strout, *The Role of Classification*, 1959.

6. Ham, Jessie Gilchrist. "Reclassification of the University of South Carolina Library Collection," *Journal of Cataloging and Classification*, 11:221-232, October, 1955.

7. "Reclassification at the University of Mississippi Library," *Library Journal*, 78:199, February 1, 1953; Bentz and Cavender, *op. cit.*, p. 252.

8. Bentz and Cavender, *op. cit.*, p. 253.

9. Reichmann, Felix. "Cornell's Reclassification Program," *College and Research Libraries*, 23:440, September, 1962.

10. *Ibid.*, p. 449.

11. Cornell University Libraries, *Report of the Director, 1964-65, p. 11.*

12. "L.C. Classification at the University of Oregon Library," *PNLA Quarterly*, 29:249, July, 1965.

13. Taylor, Desmond. "Reclassification: A Case for L.C. in the Academic Library," *PNLA Quarterly*, 29:244-245, July, 1965.

14. Bentz and Cavender, *op. cit.*, p.261.

15. "L.C. Classification at the University of Oregon Library," *PNLA Quarterly*, 29:249-250, July, 1965.

16. Custer, Benjamin A. "In the Mail," *Library Resources and Technical Services*, 9:212, Spring, 1965.

17. "Statement on Types of Classification Available to New Academic Libraries," *Library Resources and Technical Services*, 9:04-111, Winter, 1965; Verner W. Clapp, "D.C. Numbers on L.C. Cards," *Library Resources and Technical Services*, 9:393-403, Fall, 1965; and L. Quincy Mumford, "D.C. Numbers on L.C. Cards: A Supplement," *Library Resources and Technical Services*, 9:405-413, Fall, 1965.

Footnote to 16 *Supra* is an answer to one of the criticisms in the Winter, 1965, article. Also of interest is the discussion by Clapp and Mumford in following issue.

18. Gore, Daniel. "The Mismanagement of College Libraries: A View from the Inside," *AAUP Bulletin*, 52:46-51, Spring, 1966; "The Cost of Cataloging: A Neglected Topic," *Library Journal*, 89:2287-2291, June 1, 1965; and Mathilda Brugh Bryant, "Some Random Thoughts on the Cost of Classification," *Library Resources and Technical Services*, 9:367-370, Summer, 1965.

The Bryant Article is an excellent response to "The Cost of Cataloging: A Neglected Topic."

19. *The Academy* (London), March 18, 1876, pp. 261-262.

A full discussion of the importance of the article can be found in the author's work on The 1876 Conference to be published later this year by Beta Phi Mu.

20. Young, Heartsill H. "The Enduring Qualities of Dewey," Eaton and Strout, *The Role of Classification*, 1959, 62-75; Theodore Samore, "Form Division in L.C. and D.C. Classification Scheme," *Library Resources and Technical Services*, 6:243-246, Summer, 1962.

Samore makes a strong case for L.C. form divisions. The D.C. form divisions have sometimes been used as a strong argument in favor of Dewey. However, I remember a bright mathematics student assistant at Illinois who had worked with our collections for months without noticing that 05 was periodicals. One day he noticed this and it was a real revelation! What often seems obvious to librarians is not so obvious to the general public.

21. Charles Evans to William F. Poole, ALS, November 11, 1891, Poole Papers, Newberry Library.

22. Eaton, Thelma. "Classification in College and University Libraries," *College and Research Libraries*, 16:171, April, 1955.

23. Mearns, David C. *The Story up to Now; The Library of Congress, 1800-1946*. Washington: Government Printing Office, 1947, *passim*; Leo E. LaMontagne, *American Library Classification with Special Reference to the Library of Congress*. Hamden, Connecticut: Shoe String Press, 1961, Chapter XIII.

Montagne gives the development of the L.C. Classification.

24. Hanson, J.C.M. "Library of Congress Classification for College Libraries," *Library Journal*, 48:151-154, February 18, 1921.

25. American Library Association. Resources and Technical Services Division. Technical Services Directors of Large Research Libraries, "Minutes of Meetings," January 24, 1966, p. 3.

26. "Revolution at Enoch Pratt," *Wilson Library Bulletin*, 40:494, February, 1966.

27. Described in a letter of December 13, 1965, to the author by Alvin Skipsna, Head of Technical Services, Skidmore College, who worked on the project during the summer, 1965.

28. Information from a personal visit to Missouri in 1962 and discussion with Ralph Parker, Director of Libraries.

29. "Administrative Notice," *Acta Diurna*, 13:3-4, March 13, 1963.

30. Sayers, W. C. Berwick as quoted in Downs, *op. cit.*, p. 6.

31. Tauber, Maurice F. "Book Classification in University Libraries," *University of Tennessee Library Lectures*, Dale M. Bentz, Editor. Knoxville: The University Extension Division, 1952, pp. 1-15.